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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
| 10/613,104   | 07/07/2003  | Feihong Chen         | 29250-001017/US              | 4241             |
| 7590 04/23/2007<br>HARNESS, DICKEY & PIERCE, P.L.C.<br>P.O. Box 8910<br>Reston, VA 20195 |             |                      | EXAMINER<br>RUSSELL, WANDA Z |                  |
|  |             |                      | ART UNIT<br>2609             | PAPER NUMBER     |
| SHORTENED STATUTORY PERIOD OF RESPONSE   |             |                      | MAIL DATE                    | DELIVERY MODE    |
| 3 MONTHS   |             |                      | 04/23/2007                   | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                  |  |              |  |
|------------------------------|------------------|--|--------------|--|
| <b>Office Action Summary</b> | Application No.  |  | Applicant(s) |  |
|                              | 10/613,104       |  | CHEN ET AL.  |  |
|                              | Examiner         |  | Art Unit     |  |
|                              | Wanda Z. Russell |  | 2609         |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-56** are rejected under 35 U.S.C. 102(e) as being anticipated by John Ling Wing So (Pub No. US 2002/0109879 A1).

It is noted, with respect to claim 1, that the language used by applicants merely suggests or makes optional those features described as “operable to”; such language does not require steps to be performed nor limits the claim to a particular structure.

The manner of operating the device does not differentiate apparatus claim from the prior art. See MPEP 2114.

Regarding **claim 1**, Wing So discloses a network device (system, Abstract, line 1) operable to:

generate and send (setup, [0194], line 4) a backward (reverse, [0194], line 4) path request message ([0194], line 4) to a source of a separately generated, initial forward path request message associated with a forward Label Switched Path (LSP) ([0365], line 7) between the device and the source; and

receive ([0194], line 3) a backward path reservation message (setup request, [0194], line 3) from the source in order to establish a backward LSP between the device and the source, wherein the separately generated forward and backward LSPs form a bi-directional LSP between the device and the source ([0488], line 3).

Regarding **claim 2**, Wing So discloses the device as in claim 1 further operable to generate and send an initial, forward path reservation message to the source in order to establish the forward LSP after receiving the initial forward path request message ([0374], lines 4-6, and [0482], lines 1-3).

Regarding **claim 3**, Wing So discloses the device as in claim 1 further operable to generate and send a backward path reservation message ([0194], line 4) to a destination after receiving a backward path request message from the destination in order to establish a backward LSP between the device and the destination ([0488], lines 1-5).

Regarding **claim 4**, Wing So discloses the device in claim 3 further operable to separately generate and send a forward path request message to the destination in order to establish a forward LSP between the device and the destination, wherein the separately generated forward and backward LSPs between the device and the destination form a bi-directional LSP between the device and the destination ([0488], lines 1-5, and [0194], lines 1-9).

Regarding **claim 5**, Wing So discloses the device as in claim 1 wherein the forward and backward LSPs between the device and source comprise the same path ([0488], lines 1-5, and [0194], lines 1-9).

Regarding **claim 6**, Wing So discloses the device as in claim 4 wherein the forward and backward LSPs between the device and destination comprise the same path ([0488], lines 1-5, and [0194], lines 1-9).

Regarding **claim 7**, Wing So discloses the device as in claim 1 further operable to generate the backward path request message ([0264]) based on backward path parameters contained in the initial forward path request message ([0194], lines 1-5).

Regarding **claim 8**, Wing So discloses the device as in claim 7 further operable to generate the backward path request message based on routing information contained within the parameters ([0258], [0261], and [0262]).

Regarding **claim 9**, Wing So discloses the device as in claim 7 further operable to query a local database to obtain routing information in order to generate the backward path request message when routing information is not contained within the parameters ([0557], last 4 lines).

Regarding **claim 10**, Wing So discloses the device as in claim 7 further operable to generate the backward path request message based on a quality-of-service (QoS) ([0297], 4<sup>th</sup> line from the end) indicator contained within the parameters.

Regarding **claim 11**, Wing So discloses the device as in claim 7 further operable to generate the backward path request message based on best effort ([0149], last line) routing information when a QoS indicator is not contained within the parameters.

Regarding **claim 12**, Wing So discloses the device as in claim 7 wherein the traffic parameters comprise parameters selected from the group consisting of a bi-directional LSP indicator, QoS indicator and routing information ([0297], lines 1-4).

Regarding **claim 13**, Wing So discloses the device as in claim 1 further operable to request backward traffic parameters from the source when the initial path request message does not contain such parameters ([0230], and [0231]).

Regarding **claim 14**, Wing So discloses the device as in claim 1 further operable to generate and send a first delete path message to the source and to receive a second delete path message from the source in order to delete the bi-directional LSP ([0615], line 1, and [0568], lines 1-4).

Regarding **claim 15**, Wing So discloses the device as in claim 14 further operable to send the first delete path message to the source before receiving the second delete path message from the source ([0615], line 1, [0570], lines 1-2, and [0572], lines 1-end).

Regarding **claim 16**, Wing So discloses the device as in claim 14 further operable to send the first delete path message to the source after receiving the second delete path message from the source ([0615], line 1, [0570], lines 1-2, and [0572], lines 1-end).

Regarding **claim 17**, Wing So discloses a network device (system, Abstract, line 1) operable to generate and send (setup, [0194], line 4) a backward (reverse, [0194], line 4) path reservation message (setup request, [0194], line 3) to a destination after receiving a backward path request message from the destination in order to establish a backward LSP between the device and the destination ([0488], line 3).

Regarding **claim 18**, Wing So discloses the device as in claim 17 further operable to separately generate and send a forward path request message to the

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destination in order to establish a forward LSP between the device and the destination, wherein the separately generated forward and backward LSPs between the device and the destination form a bi-directional LSP between the device and the destination ([0488], lines 1-5, and [0194], lines 1-9).

Regarding **claim 19**, Wing So discloses the device as in claim 18 wherein the forward and backward LSPs between the device and destination comprise the same path ([0488], lines 1-5, and [0194], lines 1-9).

Regarding **claim 20**, Wing So discloses the device as in claim 17 further operable to generate and send a first delete path message to the destination and to receive a second delete path message from the destination in order to delete the bi-directional LSP ([0615], line 1, and [0568], lines 1-4).

Regarding **claim 21**, Wing So discloses the device as in claim 20 further operable to send the first delete path message to the destination before receiving the second delete path message from the destination ([0615], line 1, [0570], lines 1-2, and [0572], lines 1-end).

Regarding **claim 22**, Wing So discloses the as in claim 20 further operable to send the first delete path message to the destination after receiving the second delete path message from the destination ([0615], line 1, [0570], lines 1-2, and [0572], lines 1-end).

Regarding **claims 23-44**, they are method (Abstract, line 1) claims of claims 1-22, therefore they are rejected for the same reason above.



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Regarding **claims 45-56**, they are means ([0065], line 5) claims of claims 1-22, therefore they are rejected for the same reason above.

### ***Citation of Pertinent Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carpini et al. (Pub No. US 2003/0063613 A1) disclose a Label Switched Communication Network and System and Method for Path Restoration.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Z. Russell whose telephone number is (571) 270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic



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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Lana N. Le*  
04-11-07

WZR

LANA LE  
PRIMARY EXAMINER